

Appendix J. Monitoring for the Pilgrim Creek Project

RESOURCE	OBJECTIVE	TIMING	METHODOLOGY	RESPONSIBLE
Fire and Fuels/ Wildlife/Soils	Fuel Management in harvested areas and retention of coarse woody material	Post harvest review, pre-planting exam or post fuel treatment exam.	Evaluate fuel reduction needs during post-harvest inspection to establish a site-specific burn plan. Retention of large downed woody debris, measured in tons per acre, will be incorporated into the prescribed fire parameters to meet soil and site productivity needs. The amount of this material left on-site is determined by the associated Vegetative Response Unit (VRU). Photographic series guides will be used for pre and post fuel treatment monitoring the retention of coarse woody material.	Sale Administrator, District Fuels Specialist, District Silviculturist
Water/Fish Habitat	Implement Riparian Habitat Conservation Areas (RHCAs)	Prior to advertisement of timber sale(s).	Monitor application of RHCAs, during timber sale layout through the direct measurement of harvest unit boundaries adjacent to RHCAs.	Hydrologist/ Fisheries Biologist/Sale Preparation
Water/Fish Habitat	Implement and determine effectiveness of applicable Best Management Practices (BMP's)	At the end of each operating season.	This will be accomplished by completing a visual BMP inspection and compiling a report and/or sale inspection reports for each units harvested.	ID Team/Sale Administrator
Water/Fish Habitat	Monitor road drainage	On-going throughout pre-sale, sale and post sale activities. After unusual hydrologic occurrences.	Check for visually, record road drainage problems (slumping, plugged culverts, etc.) and correct where possible.	All District personnel
Water/Fish Habitat	Monitor changes in stream flow for Pilgrim Creek.	Peak flows / Various Stages	Measure discharge and stage to maintain rating curve for Pilgrim Creek.	District Hydrologist
Fish Habitat	Monitor RMO attainment	One water year post reconstruction/rehabilitation.	Measure pool frequency, width/depth ratio, bank stability, and large woody debris frequency in habitat restoration sites.	Fisheries Biologist
Roads	Road construction and reconstruction	During road construction and reconstruction activities.	On-site inspections would be conducted as a normal part of contract administration to ensure compliance with contract specifications and BMPs.	Engineering
Reforestation (Harvest Units)	Determine status of regeneration	First through third and, if necessary, 5th year following initiation of regeneration.	Monitor stocking and status of regeneration (planted or natural stands using walk-through and standard plots. Follow R1 stand procedures.	District Reforestation Technician
Reforestation (Post-Harvest Evaluation)	Verify or modify the next treatment need.	Following acceptance of log utilization, prior to initiating of any post-harvest work.	Walk-through survey. Site visits may result in changes in site preparation, reforestation, slashing, or TSI work.	District Silviculturist/Fuels Specialist
Timber	Compliance with Timber Sale Contract	During the life of the timber sale contract.	This monitoring would occur as a fundamental component of timber sale administration. Minor contract changes or modifications would be enacted when necessary to meet objectives and standards on the ground, when agreed to by the Forest Service and timber sale purchaser.	Sale Administrator
Recreation	To ensure maintenance of trails	Post harvest and/or prescribed burning.	Walk trail to observe trail condition and evaluate any need for maintenance or rehabilitation.	District Recreation Specialist

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Noxious weeds	Monitor for new invasions of noxious weeds in skid trails and landings.	Pre-harvest and following timber sale activities	Field survey and inspection.	District personnel and Noxious Weed Coordinator
Noxious weeds	Assess the effectiveness of reseeding post harvest and control/eradication of new infestations	Post harvest and subsequent growing seasons depending of the success of reseeding.	Field survey and inspection following harvest and reseeding, during growing season.	District personnel and Noxious Weed Coordinator
Wildlife	Monitor effectiveness of road closures to maintain wildlife security	During harvest activities and post harvest	Inspect seasonal closures to ensure they are operable and effective.	District personnel and District Wildlife Biologist
Wildlife	Monitor compliance with Forest Plan snag guidelines and effectiveness of snag-retention strategy in MA10 for harvest unit 40 in Alternatives 2 & 4.	Post-harvest	Determine the number, condition, and species of snags and replacement snags left in regeneration harvest unit in MA10 for Alternatives 2 and 4. Specifically, MA 10 areas within Unit 40 to evaluate effectiveness of the snag retention strategy. Unit 40 utilizes a skyline yarding system and includes 15 acres of MA 10 under Alternative 2 and 6 acres of MA 10 under Alternative 4.	District Wildlife Biologist
Old Growth	Monitor the effectiveness of treatment in maintaining, restoring, or developing old growth characteristics in selected natural fuels burn units.	Post burning.	On-site evaluation to determine if treatment objectives were met following KNF Old Growth Implementation Monitoring Strategy (7/1/07). Evaluation of each stand designated as effective old growth to determine if it still functions as old growth based on the Regional definition for old growth in western Montana. If necessary to meet Forest Plan standards, other late-successional stands in the drainage would be designated as old growth. Replacement old growth stands would be evaluated using the same protocol to evaluate progress towards old growth as a result of burning.	District Wildlife Biologist/ Fuels Specialist
Roadless Area	To determine if Roadless Area character is maintained after treatment of natural fuels through prescribed burning.	After prescribed fire activities are complete in natural fuels treatment areas.	Evaluate natural fuels burning for possible effects to wilderness attributes. These attributes are described in the Inverntoried Roadless Areas section in Chapter 3 of the DEIS and include natural integrity, apparent naturalness, remoteness, solitude, special features, and manageability/boundaries. The attributes with potential to be affected by prescribed burning are natural integrity and apparent naturalness. Apparent naturalness would be evaluated by ocular estimation of the visual character of the area. Natural integrity would be measured by the degree to which prescribed burning objectives are met in prescribed burn units. Site-specific burn plans would be prepared for each burn unit and are tiered to VRU-specific objectives regarding overstory and understory mortality.	Recreation Specialist/Fuels Specialist